



CAIT

Center for Advanced Infrastructure & Transportation
Rutgers, The State University of New Jersey

NJDOT Bureau of Research
QUARTERLY PROGRESS REPORT

Project Title:	Implementation of Weigh-In-Motion (WIM) Systems		
RFP NUMBER:		NJDOT RESEARCH PROJECT MANAGER: Nick Vitillo	
TASK ORDER NUMBER: 92 / 4-23941		PRINCIPAL INVESTIGATOR: Dr. Ali Maher	
Study Start Date: 06/14/2000 Original Study End Date: 12/31/2003 Modified Completion Date:		Period Covered: 1st Quarter 2004	

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Literature Search	10%	0%	100%	10%
1. Packaging	17%	0%	100%	17%
2. Testing	14%	0%	100%	14%
3. Site Determination	11%	10%	100%	11%
4. Field Implementation & Calibration	16%	15%	85%	13.6%
5. Monitoring and Analysis	22%	0%	0%	0%
Final Report	10%	0%	0%	0%

1. Progress this quarter by task:

- A. The DAQ computer was returned to the vendor (this is the second time in the past few months that we had to send the unit back). They were to complete the agreed repair of the DAQ system. This service included free labor for the replacement of the motherboard, CPU and power supply.
- B. DAQ devices were transferred to an alternate computer to continue progress while the original DAQ computer was sent back to its vendor for servicing.
- C. More efficient code has been written for the governing DAQ computer program.
 - 1. The new code has fewer functions and is able to be processed faster, with less stress on the CPU.
 - 2. This code also has the potential to allow the DAQ system to function independently of a user. It would continuously acquire data but would only record and save an event.
- D. The DAQ computer card has installed and tested in the alternate computer system to verify its functionality. A sample block of asphalt with a piezoelectric sensor imbedded in it was used to generate a voltage potential in the same manner as the installed sensors would.
- E. The original DAQ computer has returned from the vendor and is being outfitted with the DAQ hardware and software

2. Proposed activities for next quarter by task:

- A. Monitoring of vehicles at site for initial samples of data.
- B. Collaborating with State Police to conduct a monitoring event at weighing station. This would allow data to be compared from both sources, as to complete final calibration of our unit.

3. List of deliverables provided in this quarter by task (product date):

N/A

4. Progress on Implementation and Training Activities:

N/A

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5. Problems/Proposed Solutions:

Snow and low temperatures, have prevented us from initial field testing, as the temperature rises above freezing we anticipate being able to visit the site successfully collect data.

Total Project Budget	\$194,500.00
Modified Contract Amount:	
Total Project Expenditure to date	\$104,251
% of Total Project Budget Expended	54%

* These are approximate expended amounts for the project; these estimates are for reference only and should not be used for official accounting purposes. For a more accurate project accounting please review the quarterly invoice for this project.